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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,815	02/19/2002	Adam R. Schran	10397-3U1	7133

570	7590	04/06/2006		EXAMINER

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ART UNIT	PAPER NUMBER
2157	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _11 January 2006_.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-54_ is/are pending in the application.

    4a) Of the above claim(s) _1 and 28_ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-54_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the amendment filed on January 11, 2006. Claims 2,

7, 9, 11-27, 29, 34, 36, and 38-54 were amended. Claims 1 and 28 were cancelled.

Claims 2-27 and 29-54 are pending.

Response to Amendment

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2.   Claims 2-3, 5-14, 18, 23, 26, 27, 29-30, 32-41, 45, 50, 53, and 54 are rejected

under 35 U.S.C. 102(e) as being anticipated by Rehkopf, U.S. Patent No. 6,505,249.

Rehkopf teaches the invention as claimed including a method for benchmarking

and optimizing the end to end processing performance of a client-server based

computer system to determine the optimal values of the system variables (see abstract).

Regarding claims 2 and 29, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein the adjustments of the network configuration

settings are made through the use of an algorithm that performs statistical analysis on past network configuration setting performance test result data (col. 3, lines 13-26, col. 7, lines 3-10, Rehkopf discloses the use of statistical analysis and a statistical algorithm on past performance on the client).

Regarding claims 3 and 30, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein regression is used to perform the statistical analysis (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 5 and 32, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 6 and 33, Rehkopf teaches the method and article of manufacture of claims 2 and 29 wherein the statistical analysis is performed by the remote server (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 7 and 34, Rehkopf teaches a method and an article of manufacture a method and article of manufacture of optimizing network configuration settings for a user's client machine, the method and article of manufacture comprising:

(a) establishing a network connection between the client machine and a remote

server (col. 2, lines 21-23, Rehkopf discloses a client server based computer network

system);

(b) selecting a plurality of network configuration settings for the client machine

(col. 2, lines 23-30, col. 8, lines 58-63, Rehkopf discloses different network settins on

the client);

(c) automatically conducting one or more performance tests using the selected

network configuration settings (col. 2, lines 23-42, Rehkopf discloses benchmarking of

the end-to-end processing performance of the network); and

(d) automatically adjusting the selected network configuration settings of the

client machine, based on the results of the performance tests, wherein the adjusted

network configuration settings are settings that optimize the performance of the client

machine (col. 6, lines 37-45, Rehkopf discloses optimal value of the performance

variables chosen to modify the system and optimize performance),

wherein a different predefined group of network configuration settings is selected

for each test performed (col. 2, line 59 – col. 3, line 11, Rehkopf discloses different

benchmarking tests).

Regarding claims 8 and 35, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 further comprising:

(e) the user specifying, via the client machine, at least one network performance

preference; and

(f) executing performance metric scoring on each of the different predefined groups of network configuration settings, based on a relative weight assigned to the network performance preference (col. 2 and 3).

Regarding claims 9 and 36, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein logic running on the remote server statistically analyzes the results of the performance tests and determines one or more sets of network configuration settings for use on the client machine (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 10 and 37, Rehkopf teaches the method and article of manufacture of claims 9 and 36 wherein the logic includes an intelligent optimization algorithm which uses historical performance data to statistically assess positive or negative scoring variations when a particular network configuration setting is adjusted (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 11 and 38, Rehkopf teaches the method and article of manufacture of claims 7 and 34 wherein the adjustments of the network configuration settings are made through the use of an algorithm that determines future groups of network configuration settings to test (col. 3, lines 13-26, col. 7, lines 3-10).

Regarding claims 12 and 39, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 further comprising:

(e) continually monitoring the network configuration performance of the client

machine, after step (d) has been performed; and

(f) automatically adjusting the monitored network configuration settings of the

client machine to maintain optimal network performance of the client machine (col. 4,

lines 35-54, Rehkopf discloses continually monitoring performance and re-evaluating).

Regarding claims 14 and 41, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein one of the network configuration settings is

latency (col. 8, lines 1-19, Rehkopf discloses bandwidth).

Regarding claims 18 and 45, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein one of the network configuration settings is

Maximum Segment Size (MSS) (col. 8, lines 1-19, Rehkopf discloses segment size).

Regarding claims 23 and 50, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein one of the network configuration settings is

packet size (col. 8, lines 1-19).

Regarding claims 26 and 53, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 further comprising:

(e) assigning a percentage score to each applicable network configuration

setting;

(f) multiplying the relative weight of each network configuration setting by the

percentage score for the network configuration setting, wherein the relative weight is

determined as a function of the user's network performance preferences; and

(g) adding the resulting products of step (f) to determine a weighted overall

percentage score (col. 2, 3).

Regarding claims 27 and 54, Rehkopf teaches the method and article of

manufacture of claims 7 and 34 wherein step (b) further comprises:

(b)(i) the user selecting a set of default network configuration settings (col. 2,

lines 23-30).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   In considering claims 4 and 31, Rehkopf is silent in that a polynomial curve fit is

used to perform statistical analysis. "Official notice" is taken that both the concept and

the advantages of a polynomial curve fit are well known in the art. It would have been

obvious to one skilled in the art to utilize a polynomial curve fit as an efficient way to perform statistical analysis.

In considering claims 15-17, 19-22, 24, 25, 42-44, 46-49, 51, and 52, Rehkopf is silent in that ping time, network connection stability, Maximum Transmission Unit (MTU), Receive Window (RWIN), Time To Live (TTL), Black Hole Detection, Auto Discovery of Path Maximum Transmission Unit (MTU), upload throughput speed, and download throughput speed are various forms of network configuration settings. "Official notice" is taken that both the concept and the advantages of those settings are well known in the art. It would have been obvious to one skilled in the art to analyze and adjust those settings in the network to monitor and optimize the performance of a network.

5.   Claims 13 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rehkopf further in view of Easty et al., U.S. Patent No. 6,189,008.

Rehkopf teaches the invention substantially as claimed including a method for benchmarking and optimizing the end to end processing performance of a client-server based computer system to determine the optimal values of the system variables (see abstract).

Regarding claims 13 and 40, Rehkopf teaches a method and an article of manufacture a method and article of manufacture of optimizing network configuration settings for a user's client machine, the method and article of manufacture comprising:

(a) establishing a network connection between the client machine and a remote

server (col. 2, lines 21-23, Rehkopf discloses a client server based computer network

system);

(b) selecting a plurality of network configuration settings for the client machine

(col. 2, lines 23-30, col. 8, lines 58-63, Rehkopf discloses different network settins on

the client);

(c) automatically conducting one or more performance tests using the selected

network configuration settings (col. 2, lines 23-42, Rehkopf discloses benchmarking of

the end-to-end processing performance of the network); and

(d) automatically adjusting the selected network configuration settings of the

client machine, based on the results of the performance tests, wherein the adjusted

network configuration settings are settings that optimize the performance of the client

machine (col. 6, lines 37-45, Rehkopf discloses optimal value of the performance

variables chosen to modify the system and optimize performance),

Rehkopf fails to teach the limitation further including storing on the remote server,

network configuration settings and aggregate test results associated with other client

machines that previously established a network connection with the remote server,

wherein the user's client machine receives network configuration setting

recommendations from the remote server, based on the network configuration settings

and the aggregate test results stored on the remote server.

However, Easty teaches managing the digital assets of the endpoint servers

based on aggregate profile information reflecting the preferences of the user population

served by the endpoint server (see abstract). Easty teaches the use of contents

recommended to a user from a database, on a server, which is based on aggregate

profile that reflects the preferences of the end-user population (col. 4, line 66 – col. 5,

lines 7; col. 5, lines 35-45).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Rehkopf in view of Easty to store on the remote server, network

configuration settings and aggregate test results associated with other client machines

that previously established a network connection with the remote server, wherein the

user's client machine receives network configuration setting recommendations from the

remote server, based on the network configuration settings and the aggregate test

results stored on the remote server. One would be motivated to do so because it allows

for quicker and more accurate configuration settings.

Response to Arguments

6.   Applicant's arguments with respect to claims 13 and 40 have been considered

but are moot in view of the new ground(s) of rejection.

7.   Applicant's arguments filed January 11, 2006 have been fully considered but they

are not persuasive.

Regarding the argument to claims 7 and 34, the applicant argues that the

reference, Rehkopf, does not disclose a different predefined group of network

configuration settings selected for each test performed. The examiner respectfully

disagrees, as seen in, col. 2, line 59 – col. 3, line 26; col. 3, lines 34-56; col. 6, lines 37-45, there are difference performance values used, optimal values of the performance variables chosen to modify the system and optimize performance, and four different categories of performance variables used. The floating variable that is used, is used in addition to the predefined group of setting.

Conclusion

8.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,842,431 to Clarkson et al.

U.S. Pat. No. 6,725,229 to Majewski et al.

U.S. Pat. No. 6,292,483 to Kerstein

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002. The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
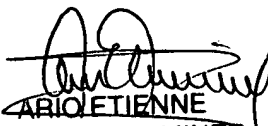
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PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2157

AMG

ARIO ETIENNE
PRIMARY EXAMINER